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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,163	02/02/2001	Ronald J. Loftus	42059-01140	9626
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TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			MILLS, DONALD L	
			ART UNIT	PAPER NUMBER
			2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/776,163

Applicant(s)

LOFTUS, RONALD J.

Examiner

Donald L. Mills

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities:

Regarding claim 1, line 4, “on B-link” should be corrected to – one B-link –.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10, 19, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 19, and 20, the claims specify *the at least one B-link is used in place of a larger number of A-links* (For example, see claim 1, lines 5-6.) This particular limitation of claim specifies, “a pair of STPs connected to another STP via at least one B-link.” It is well-known in the art that B-links, bridge links, interconnect mated pairs of STPs in either the same or different level of hierarchy while A-links, access links, interconnect an STP to either an SSP or an SCP. Since, an A-link would not be used to interconnect a pair of STPs the intended meaning of replacing supposed A-links that interconnect STPs with B-links is unclear from the context of the claim. Further clarification and explanation is requested. For the purpose of this examination, the Examiner will interpret the claim as specifying B-links between STPs.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baxley et al. (US 6,657,975 B1), hereinafter referred to as Baxley.

Regarding claim 1, Baxley discloses an audio conferencing method in a hybrid network, which comprises:

At least one pair of signal transfer points, each of which is connectable to at least one other STP within the public switched telephone network via at least one B-link, wherein SS7 signals are transferred there between and wherein the at least one B-link is used in place of a large number of A-links (Referring to Figure 1, SS7 network 60 inherently comprises redundant communication between STP pairs for SS7 signals. An SS7 network, by definition, comprises pairs of STPs, which are interconnected by B-links, bridge links.)

A media gateway, with its own point code (Referring to Figure 1, CACS 170 utilizes SCP 72 that connects to SS7 network 60, comprising STP pairs, and Media Gateway 90, comprising a logical address. See column 4, lines 6-8 and 15-17,)

At least one switch that aggregates signaling control connectable to the at least one pair of STPs which in turn is connectable to the media gateway (Referring to Figure 1, CACS 170 utilizes SCP 72 that connects to SS7 network 60, comprising STP pairs, and Media Gateway 90,

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comprising a logical address. See column 4, lines 6-8 and 15-17,) *wherein the switch controls the processing of the voice information received at the media gateway from the circuit switched of the PSTN in response to the SS7 signals received through the at least one pair of STPs, the voice information being switched from the circuit-switched network to a packet-switched network and back to a circuit-switched network* (Referring to Figure 1, CACS 170 controls signals for voice received by the Media Gateway 90 from the SS7 network according to the SS7 signals communicated by the STP pairs for audio conferencing switching between GSTN endpoint 30 and packet-based endpoint 120 which converts circuit-switched data to packet-switched data and vice-versa for session between the two endpoints. See column 4, lines 11-16 and 36-66.)

Baxley does not disclose *a plurality of media gateways, each with its own point code.*

Baxley teaches a media gateway with its own point code as CACS 170 which utilizes SCP 72 that connects to SS7 network 60, comprising STP pairs, and Media Gateway 90, comprising a logical address (See column 4, lines 6-8 and 15-17.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement multiple media gateways in the system of Baxley. One of ordinary skill in the art would have been motivated to do so to scale the audio conferencing system of Baxley with expanding circuit and packet switched networks to adequately serve an expanded network.

Regarding claim 2, the primary reference further teaches *a first STP of the at least one pair of STPs is located at a first geographic location and a second STP of the at least one pair of STPs is located at a second geographic and a communications link is provided there between*

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(Referring to Figure 1, SS7 network 60 inherently comprises redundant communication between STP pairs for SS7 signaling where the STPs are located at different geographically locations.)

5. Claims 3-10, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baxley et al. (US 6,657,975 B1), hereinafter referred to as Baxley, in view of Pester, III (US 5,475,732), hereinafter referred to as Pester.

Regarding claim 3 as explained in the rejection statement of claim 1, Baxley discloses all of the claim limitations of claim 1 (parent claim).

Baxley does not disclose *a first switch is in communication with the first STP at the first location and a second switch is in communication with the second STP at the second location.*

Pester teaches SCP 68 that connects to STP1 40 and SCP 70 that connects to STP3 44 (See Figure 1.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the SCPs of Pester in the system of Baxley. One of ordinary skill in the art would have been motivated to do so in order to connect to SS7 networks that span multiple regions.

Regarding claim 4 as explained above in the rejection statement of claim 1, Baxley discloses all of the claim limitations of claim 1 (parent claim). Baxley further discloses *the first switch includes a switching router which is connectable together over a packet transport network* (Referring to Figure 1, CACS 170 comprises a signaling gateway 75 which connects to a packet based end point. See column 8, lines 3-6.)

Baxley does not disclose *a second switching device.*

Pester teaches SCP 68 that connects to STP1 40 and SCP 70 that connects to STP3 44
(See Figure 1.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the multiple Service Control Points of Pester in the system of Baxley. One of ordinary skill in the art would have been motivated to do so in order to connect to multiple packet-based networks that span different regions.

Regarding claim 5 as explained in the rejection statement of claim 1, Baxley discloses all of the claim limitations of claim 1 (parent claim).

Baxley does not disclose *the switching routers are configured to transfer encapsulated SS7 messages between each of the second pair of STPs.*

Pester teaches that SS7 messages, containing the Message Transport Part (MTP) embedded in the same position, traverse the network, comprising STP1 40 and STP3 44, at all times (See column 6, lines 38-54.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the multiple STPs and SCPs of Pester in the system of Baxley. One of ordinary skill in the art would have been motivated to do so in order to connect to multiple packet-based networks that span different regions.

Regarding claim 6, the primary reference further teaches *the first switch includes a plurality of call/media computers configured to process the SS7 received by the at least one pair of STPs and to generate control signals which are transmittable over a data network to the media gateway which provides for the voice-to-data processing* (Referring to Figures 1 and 7, CACS 170 comprises SCP 72 and SS7 Signaling Gateway 70 which process the received signals

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from the SS7 network, inherently utilizing a pair of STPs; and bridge server 50 receives the SS7 signals and converts the SS7 Signals to packet signals for transmission to the media gateway 90 which processes the voice to data. See column 4, lines 5-8 and column 11, lines 7-9.)

Baxley does not disclose *a second switching device*.

Pester teaches SCP 68 that connects to STP1 40 and SCP 70 that connects to STP3 44 (See Figure 1.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the multiple Service Control Points of Pester in the system of Baxley. One of ordinary skill in the art would have been motivated to do so in order to connect to multiple packet-based networks that span different regions.

Regarding claim 7, the primary reference further teaches *the plurality of call/media computers are connectable to the at least one pair of STPs through a communications network which comprises a logical A-link* (Referring to Figure 1, SCP 72 and SS7 Signaling Gateway 70 connect to SS7 Network 60 inherently comprises an A-link.)

Regarding claim 8, the primary reference further teaches *the communications network comprises at least one of: a local area network (LAN) and a wide area network (WAN)* (Referring to Figure 1, circuit switched network 20.)

Regarding claim 9, the primary reference further teaches *the plurality of call/media computers provide at least one of: class 4 and class 5 switching services* (Referring to Figure 1, conference system 100.)

Regarding claim 10 as explained in the rejection statement of claim 1, Baxley and Pester teach all of the claim limitations of claim 1 (parent claim).

Baxley does not disclose *the at least one pair of STPs is further configured to perform lower level SS7 protocol processing and encapsulate SS7 ISUP message for transfer over an IP network.*

Pester teaches that SS7 messages, containing Integrated Services User Part (ISUP) embedded in the signal, traverse the network (See column 6, lines 38-54.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the SS7 messages of Pester in the system of Baxley. One of ordinary skill in the art would have been motivated to do so in order to support full SS7 service in a hybrid network.

Regarding claims 19 and 20, Baxley discloses an audio conferencing method in a hybrid network, which comprises:

At least one pair of signal transfer points, each of which is connectable to at least one other STP within the public switched telephone network via at least one B-link, wherein SS7 signals are transferred there between and wherein the at least one B-link is used in place of a large number of A-links (Referring to Figure 1, SS7 network **60** inherently comprises redundant communication between STP pairs for SS7 signals. An SS7 network, by definition, comprises pairs of STPs, which are interconnected by B-links, bridge links.)

A media gateway, with its own point code (Referring to Figure 1, CACS **170** utilizes SCP **72** that connects to SS7 network **60**, comprising STP pairs, and Media Gateway **90**, comprising a logical address. See column 4, lines 6-8 and 15-17,)

At least one switch that aggregates signaling control connectable to the at least one pair of STPs which in turn is connectable to the media gateway (Referring to Figure 1, CACS **170**

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utilizes SCP 72 that connects to SS7 network 60, comprising STP pairs, and Media Gateway 90, comprising a logical address. See column 4, lines 6-8 and 15-17,) *wherein the switch controls the processing of the voice information received at the media gateway from the circuit switched of the PSTN in response to the SS7 signals received through the at least one pair of STPs, the voice information being switched from the circuit-switched network to a packet-switched network and back to a circuit-switched network* (Referring to Figure 1, CACS 170 controls signals for voice received by the Media Gateway 90 from the SS7 network according to the SS7 signals communicated by the STP pairs for audio conferencing switching between GSTN endpoint 30 and packet-based endpoint 120 which converts circuit-switched data to packet-switched data and vice-versa for session between the two endpoints. See column 4, lines 11-16 and 36-66.)

Baxley does not disclose *a plurality of media gateways, each with its own point code.*

Baxley teaches a media gateway with its own point code as CACS 170 which utilizes SCP 72 that connects to SS7 network 60, comprising STP pairs, and Media Gateway 90, comprising a logical address (See column 4, lines 6-8 and 15-17.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement multiple media gateways in the system of Baxley. One of ordinary skill in the art would have been motivated to do so to scale the audio conferencing system of Baxley with expanding circuit and packet switched networks to adequately serve an expanded network.

Baxley does not disclose *transmission of a telephone call originating in an SSP and terminating in an SSP.*

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Baxley teaches an SS7 network 60, however, the details of the SS7 network are not disclosed. Pester teaches a common channeling signaling network maintenance and testing method and system which comprises an SS7 network composed of Signaling Points (SSP) which originate, terminate, or tandem calls (See Figure 1 and column 3, lines 50-54.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Signaling Points of Pester in the SS7 network of Baxley. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to originate, terminate or tandem calls from the GSTN of Baxley as taught by Pester (See column 3, lines 50-54.)

Response to Arguments

6. Applicant's arguments with respect to claims 1-10, 19, and 20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Mills whose telephone number is 571-272-3094. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Donald L Mills

DeM

June 9, 2006

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